# Leading Health Care In The 21st Century





What You Need to Know About Herbal Therapy



If you have questions about the contents in this booklet, please contact your provider or one of the Outpatient Dietitians listed below:

Albany VA Medical Center (518) 626-5000 ext. 66871

Bath VA Medical Center (607) 664-4912

Batavia VA Western New York VA Healthcare System (585) 344-3329

Buffalo VA Western New York VA Healthcare System (716) 834-9200 ext. 5507

Canandaigua VA Medical Center (585) 394-2000 ext. 37289 (Monday, Wednesday) ext. 37334 (Tuesday, Thursday, Friday)

Rochester Outpatient Clinic (585) 242-0160 ext. 2215

Rome Outpatient Clinic (315) 330-5626

Syracuse VA Medical Center (315) 476-7461 ext. 2419

### **VA Healthcare On The Web**

www.va.gov/visns/visn02/

Upstate New York Veterans ~ Wherever you are, When you need help ...

VA TELCARE 1-888-838-7890



## **Table of Contents**

What is Herbal Therapy?	. 4
Things to Know Before You Take a Herbal Medicine	4
How should I choose an herbal product?	. 4
Where can I get more information about herbal therapies?	. 5
Are all herbal remedies good for you?	. 5
Herbs	
Aloe Vera	. 6
Bilberry	. 7
Cayenne	. 8
Chamomile	. 9
Echinacea	10
Feverfew	11
Garlic	12
Ginger	13
Ginkgo Biloba (also known as Ginkgo)	14
Ginseng	15
Goldenseal	16
Hawthorn	17
Kava (also known as Kava Kava)	18
Licorice	19
Milk Thistle	20
Saw Palmetto	21
St. John's Wort	22
Valerian2	
Quick Reference - Conditions	24
Quick Reference - Medication	25
Herbs that are Unsafe	26
Herbs that Could Potentially Increase Risk for Bleeding	26
Herbs that Contain Coumarin Derivatives (Increased Risk for Bleeding) $\dots$ 2	
Herbs that Contain Salicylates	
Supplements that Can Cause Elevations in the INR	28

## What is Herbal Therapy?

Herbs have been used in medicine for as long as people have been on earth. The use of herbal therapies has been recorded in ancient Greece, Egypt, Rome, India, Russia and China.

There are many examples of drugs used today that are from plants. They may come from the plant's leaves, roots, flowers or fruits. Digoxin is a good example of a drug that comes from a plant source. Digoxin is used to treat problems with heart rhythms or heart failure. Psyllium, the ingredient in Metamucil<sup>©</sup> used to add fiber to a patient's diet, is also a natural product.

Herbal therapy has been gaining popularity in the United States as a compliment to "conventional medicine." In many other countries herbs are already regulated by the government and available by prescription.

## Things to Know Before You Take a Herbal Medicine

Herbal therapies are considered a food supplement. The FDA does not control herbal therapies, so there is no guarantee that these products are safe or effective. Unlike other drugs, no testing needs to be done before a company can claim that an herbal product works.

#### How should I choose an herbal product?

Discuss your choice with your health care provider. Then look for a brand that standardizes their product. This means that the same amount of herb is in each dose. Avoid products that do not list the ingredients and their strengths on the label. The label should list the scientific name of the product, a lot or batch number, the date the product was manufactured and the expiration date.



### Where can I get more information about herbal therapies?

There are many sources of information on herbs, but be sure it is from a neutral source, not advertising by an herbal manufacturer. Your first source of medical information should always be your health care provider. Physicians, nurses, physician assistants, dietitians and pharmacists are all good people to ask. Your local library may carry books on herbal therapies.

Many herbal therapies do have an effect on your body. Before starting any new treatment, you should know what the risks and benefits are. Any medicine, herbal or other, should be discussed with your health care provider before using.

Herbs are not miracle cures. You should not stop taking your prescription medicine without speaking to your health care provider. Doing so may be dangerous to your health.

When taking these supplements, if the dose on the label differs from what is recommended in this booklet, please contact a pharmacist or a dietitian at your hospital.

### Are all herbal remedies good for you?

Not all herbal therapies are safe for all people. It is possible to have an allergic or toxic reaction to an herb. Herbs may interfere with the effects of your other prescribed medicines. Page 26 of this pamphlet lists some herbal remedies that have been shown to be dangerous.

## **Aloe Vera**

Aloe Vera has been used in medicine for thousands of years. It was brought to America in the 1500's by the Spaniards.

**Uses:** Aloe gel is used on burns, scrapes,

cuts, and sunburn. Aloe juice has

been used internally for constipation.

How it works: On the skin, aloe turns off the chemicals that cause

swelling and pain. It may also fight bacteria and fungus. Fresh aloe gel straight from a plant seems to

work better than the aloe gel sold in stores.

The aloe juice that you can drink is a very powerful laxative. It stops the intestine from re-absorbing water.

**Dose:** Aloe gel may be applied to your skin in whatever

amount is comfortable for you. The amount of aloe iuice to drink is not really known. But DO NOT

drink more that 1-quart per day.

**Safety:** Because drinking aloe juice is such a powerful

laxative and can cause diarrhea and cramping, it is

not recommended for use.

Aloe juice should never be given to children or elderly patients.

Aloe may affect your absorption of other medications and should not be taken within two hours of taking any other medicine. Diabetics should monitor blood sugars closely after drinking aloe juice.

## **Bilberry**

Bilberry is a relative of blueberries. Blueberries are said to have the same effects as billberries.

**Uses:** May improve night blindness,

diabetic retinopathy, varicose veins

and hemorrhoids.

How it works: Stabilizes collagen and blood vessels.

**Dose:** Look for billberry extract standardized to 25%

anthocyanidin content. Dose is 160 mg two times

daily.

**Safety:** No known side effects to billberry but billberry may

affect blood clotting.

Patients on Warfarin, Ticlopidine, and Clopidogrel or those with bleeding disorders should not use unless instructed to do so by a medical health care provider.



## Cayenne

Cayenne pepper or capsaicin is from a family of peppers.

Internal Use: Stimulates circulation, gastric stimulant.

Has a protective effect on the stomach.

External Use: Decreases nerve related pain such as

diabetic neuropathy, fibromyalgia and shingles

(FDA approved).

**How it works:** Cayenne depletes a substance in the body that

mediates pain.

**Dose:** On the skin: 0.025% to 0.075% applied four

times daily.

Capsules: 100 - 600 mg three times daily.

Tincture: (1:10): 10 - 40 drops three times daily.

**Safety:** Side effects of eating cayenne pepper may include

stomach upset, diarrhea, and burning during bowel

movements. Increasing the dose of cayenne

gradually may help.

When using the capsaicin cream on the skin, the product must be used four times a day and must be used on a continuous basis to be effective. Avoid touching the eyes or any cuts after handling the cream. Vinegar can be used to remove cayenne from the hands.

Patients taking Warafin (Coumadin) and/or Theophylline should not take cayenne internally since it increases bleeding time.

## **Chamomile**

Chamomile has been a popular herb for a long time. You may remember its use in the story "The Tale of Peter Rabbit."

Internal Use: Teas and tinctures can be used

for stomach spasms, menstrual

cramps, stomach upset and as a gentle sleep aid.

External Use: Chamomile may be used for skin irritations,

hemorrhoids, and mouth irritations.

How it works: The ingredients of chamomile can reduce swelling.

One ingredient in chamomile is chemically related to

drugs like Valium and Ativan.

**Dose:** On the skin: chamomile cream; apply to affected area

one to four times daily. Capsules: 800 - 1,000 mg.

Tincture: 3 - 60 drops three times daily.

Tea: 1 tablespoonful of flowers steeped in 1 cup

boiling water for 30 - 60 minutes.

(May also be used cooled as a gargle, mouth rinse or

for compresses.)

**Safety:** Chamomile is one of the herbs that some patients

may have an allergic reaction to, especially if you are

allergic to ragweed, daisies, or chrysanthemums.

Chamomile should be used with caution in patients on Warfarin, blood thinners or Quinidine.

## **Echinacea**

Echinacea, commonly known as purple coneflower, is a member of the daisy family.

**Internal Use:** Can be used at the start of

cold and flu symptoms. Limit use to 14 days.

External Use: Can be used for wounds,

eczema, burns, psoriasis and other conditions.

**How it works:** Echinacea is believed to stimulate the immune

system.

**Dose:** Crude Herb: 300 mg three times a day.

Tincture: (1:5) 3 ml three times a day.

Echinacea Juice: 3 mg three times a day.

**Safety:** Side effects can include bad taste, minor indigestion,

abdominal discomfort and mild dehydration.

Patients who are allergic to sunflowers or ragweed

should not take echinacea.

Patients with auto-immune disorders such as multiple sclerosis, lupus, leukocytosis, AIDS, leukemia and anyone taking immuno-suppressant drugs (Cyclosporine, etc.) should not take echinacea. Patients with immune system problems should also not take echinacea. Echinacea may cause the tongue to tingle. If you drink freshly pressed juice you may develop a fever.

## **Feverfew**

The name of feverfew (parthenolide) comes from its original use as a fever reducer.

**Uses:** Prevention of migraine

headaches. Swelling and fever

reducer.

**How it works:** Feverfew is believed to work the

same as other products that reduce swelling. It decreases the production of a chemical that causes the swelling and pain. It also stops the release of

histamine and serotonin.

**Dose:** The minimum recommended concentration of is

0.2%. A single daily dose of 500 - 2,500 mcg is

recommended.

**Safety:** The main side effect is irritation of the tongue and

the lining of the mouth. Some people also have

indigestion.

Patients interested in taking feverfew should take care to find a good, quality product. Many of the available products tested have been found to contain no active ingredients.

Patients taking Warfarin should not take feverfew.



## Garlic

Garlic has been used medicinally for thousands of years. In World War I, the English used garlic in dressings and it was credited with saving the lives of thousands of troops.



**Uses:** Garlic has been shown to reduce blood pressure and

cholesterol. Some believe that garlic aids in cancer

prevention and in killing some germs.

How it works: The compounds that influence enzyme release

explain garlic's effect on blood pressure. Exactly how it reduces cholesterol, kills germs, and prevents

cancer is not known.

**Dose:** Garlic preparations standardized for alliin are

preferred. The recommended daily dose is 8,000 - 12,000 mcg of alliin. This is equivalent to 1 - 2 cloves

of fresh garlic.

**Safety:** The most common side effect is offensive odor.

Nausea, heartburn and facial flushing have also been

reported and is related to the amount used.

Patients taking Warfarin and those who have diabetes should not exceed two cloves of raw garlic per day. Eating garlic that has been cooked, dried or frozen decreases it's effects on lowering cholesterol, blood pressure and blood sugar.

**Ginger** 

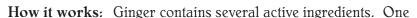
**Uses:** May help in the treatment

and prevention of motion sickness, morning sickness, and postoperative nausea.

Also has been used for

arthritis, muscular pain, and

migraine headaches.



ingredient has been shown to increase movement in the GI tract. Ginger also helps block some

mediators of pain and swelling.

**Dose:** Powdered ginger root: 1 - 4 grams/day. Some studies

suggest that fresh ginger root may be better (1 - 2

grams of powder = 1/4 inch slice)

**Tea:** 1/4 slice ginger brewed in 1 cup water. To prevent

motion sickness, 1 gram of ginger should be taken 30 minutes prior to departure and 500 mg to 1 gram

as symptoms begin to occur.

**Safety:** Large doses of ginger may upset stomach. Doses

larger than 6 grams daily are not recommended.

Warfarin patients should not use ginger as an herbal therapy. Patients on calcium channel blockers (Amlodipine, Nifedipine, Felodipine, Diltiazem and Verapamil) should consult a physician before using ginger.



## Ginkgo Biloba (also known as Ginkgo)

The ginkgo tree has existed on earth longer than any other. A Chinese medical book from 2800 BC talks about the use of ginkgo seeds. In 1988, German physicians wrote more prescriptions for ginkgo than any other medication.

**Uses:** Treatment of cerebral vascular insufficiency, peripheral vascular disease, hearing loss, dizziness, asthma and ringing of the ears. Recent studies have

also shown ginkgo to be valuable in treating

dementia.

**How it works:** The active ingredients of ginkgo have been shown to

protect nerves and may revive damaged nerve cells. They also help the tone and elasticity of blood vessels and increase transmission of brain

chemicals.

**Dose:** Look for a ginkgo biloba extract standardized to

24% flavanoid glycosides and 6% lactones. Recommended daily amount is 120 - 160 mg in divided doses. A treatment period of four to six

weeks in needed to determine effectiveness.

**Safety:** In less than 1% of studied subjects, mild GI

disturbances were reported. Slowly increasing the dose may lessen GI effects. Mild headache, lasting

24 - 48 hours, has also been reported.

Patients on anti-platelet or anti-coagulant medicines such as: aspirin, Trental, Plavix, Pletal, Warfarin and Quinidine should not take ginkgo. Diabetics should take with caution, as ginkgo may elevate blood glucose levels.



## Ginseng

Ginseng is the most widely used of all medicinal herbs. It consists of dried roots of several species of ginseng. Although one of the most popular herbs, it is also one of the herbs with very little documented information to support its use.



**Uses:** Ginseng is most commonly used as a tonic to help

get the body back to health.

How it works: The active ingredients of ginseng are ginsenosides.

Animal studies have shown ginseng lowers blood pressure, lowers cholesterol, and protects against stress ulcers. No studies in humans have duplicated

these effects.

**Dose:** The usual dose of ginseng is 1 - 2 grams daily

depending on the ginsenoside content. Other sources recommend 2 - 4 ml of fluid extract (1:1)

taken one to three times daily.

**Safety:** Ginseng is the example most often used to encourage

the regulation of herbal therapies. Experiments in the late 1970s showed that 60% of the products tested contained so little ginseng they were worthless, and 25% contained no ginseng at all.

Side effects of ginseng include insomnia, irritability, anxiety, skin eruptions, diarrhea, headaches, low blood sugar, and increased blood pressure.

People with high blood pressure should not take ginseng. Warfarin patients should not take ginseng. Patients with diabetes should check with their medical health care provider on whether this supplement is right for them. Patients on monoamine oxidase inhibitors should not take ginseng.



## **Goldenseal**

Goldenseal, also known as yellow root, is a member of the buttercup family.

**Uses:** Goldenseal may be used as a

tonic for the mucous membranes;

possibly working as a digestive aid and an expectorant. It gained popularity when heroin addicts believed that taking large amounts of goldenseal could prevent detection of opiates in the bloodstream. This has since been proven to be

untrue.

How it works: Alkaloids found in goldenseal are responsible for

whatever actions it has, causing slight

vasoconstriction and sedation.

**Dose:** Tincture 20 - 90 drops three times daily. Capsules

should be standardized to 5% hydrastine; dose is

250 - 500 mg three times daily.

**Safety:** Goldenseal may cause low blood sugar in diabetics.

Nausea and vomiting have also been reported with

goldenseal use.

Patients with high blood pressure, history of seizures, or women who are pregnant should not use goldenseal.

## Hawthorn

Compared to other herbal remedies, hawthorn is relatively new.

**Uses:** Hawthorn has been used for high

blood pressure, disturbances in heart rhythm, hardening of the

arteries, and chest pain.

How it works: Hawthorn helps to increase blood supply to the heart

tissue. It also helps increase the strength of the heartbeat. It blocks an enzyme, which helps to lower blood pressure, in a way similar to drugs such as Lisinopril, Fosinipril, Captopril, and Quinapril.

**Dose:** Look for capsules or tablets standardized to 1.8%;

dose is 100 - 250 mg. Also may be taken as 1 - 2 ml

of fluid extract (1:1 three times daily)

**Safety:** Hawthorn's activity is not immediate and develops

slowly over time. High doses of hawthorn may cause low blood pressure and sedation. Very few adverse effects have been reported with low doses,

but hawthorn should not be stopped abruptly.

Because hawthorn is used to treat heart conditions it should only be used under the supervision of a physician. If hawthorn is used in conjunction with Digoxin or ACE inhibitors, the dose of these agents may need to be decreased.



## Kava (also known as Kava Kava)

Kava is a drink of the South Pacific that was first introduced to the modern world by Captain James Cook. Since then, kava has been served to officials



visiting the South Pacific, including presidents and Pope John Paul II. Most commonly, kava is served as a tea made of the dried roots.

**Uses:** Treatment for nervousness, restlessness, and stress.

How it works: It is believed to work like the drugs Valium or Xanax.

**Dose:** An extract of 55 - 70% kayalactones is the current

standard. The daily dose of kava should be 140 - 210 mg in two to three doses. Fresh kava (not usually

available in America) is the most effective.

**Safety:** When used on a regular basis, kava can cause a dry

scaly rash on the palms on the hands and the soles of the feet. It may also cause the skin, hair or nails to turn yellow. Some patients may be allergic to kava.

Kava can cause a feeling of giddiness. Patients taking kava should not drive or operate heavy machinery. Patients should not drink alcohol or take other drugs for treating stress when using kava.

### Licorice

Licorice is the rhizomes and roots of the plant glycyrrhiza, which is called licorice root. It is used for flavoring candy, diet drinks, and tobacco products. It's also used as an herbal remedy, most commonly combined with other herbal supplements.



**Uses:** May help in soothing a cough

and acting like an expectorant. In a multiple herbal supplement, it's used to cause fluid retention in order to counteract the water losses associated with laxatives like senna.

How it works: It acts on mucous surfaces due to its acid resin.

**Toxic Limit:** An intake that exceeds 0.5 mg glycyrrhizin per day

is toxic and can cause serious life threatening symptoms. This is equivalent to 3.5 oz. of licorice candy or 1/4 oz. licorice root in 8 oz. water (cough

remedy) or 24 oz. chewing tobacco.

This is a very unsafe herbal remedy. Consumed in small quantities from candy it can be safe, but

should be taken with much caution.

**Safety:** It can cause headaches, lethargy, sodium and water

retention, high blood pressure, heart failure,

cardiac arrest, low potassium level and decreased

testosterone levels.

Many licorice candies are actually flavored with anise as opposed to licorice root. Read the ingredient list to see if the product contains glycyrrhizn or anise. Anise is a safe flavoring additive.



## Milk Thistle

Milk thistle is a tall herb with prickly leaves and a milky sap. Use of the herb can be traced back to the Romans of the first century. The fruit of this plant has been found to work best.

**Uses:** Can help to protect and detoxify

the liver. It has been used

successfully to lower the number of deaths from cirrhosis. It has also been used for viral hepatitis

and mushroom poisonings.

How it works: An active ingredient in milk thistle works on the

factors that are responsible for liver damage. It protects those liver cells not irreversibly damaged

and helps the regeneration process.

**Dose:** The correct dose of milk thistle is based on its

silvmarin content. The usual dosage range is 200 -

400 mg daily in divided doses.

**Safety:** European studies show that milk thistle has very low

toxicity. Possible side effects may be loose stools

and allergic reaction.

## **Saw Palmetto**

Saw palmetto is a small scrubby palm tree.

**Uses:** To treat an enlarged prostate

and prostatitis.

**How it works:** Saw palmetto blocks the

changing of testosterone to
DHT which helps to shrink the

prostate gland. Saw palmetto

also relaxes the smooth muscles at the opening of

the bladder, making it easier to urinate.

**Dose:** The extract should be standardized to 85 - 95% fatty

acids and sterols. The dose of this extract is 160 mg twice daily. Take with meals to reduce chances of acid indigestion and abdominal discomfort. It will take at least four weeks of being on this supplement

before benefits can be seen.

**Safety:** The number of side effects for saw palmetto is small.

The most common effect is headache. This is not appropriate for advanced stages of an enlarged prostrate gland especially those that include severe

urinary retention.

Before using saw palmetto, patients should have a test to be sure they do not have prostate cancer. Patients on any hormone therapy (such as taking medicines like estrogen, progesterone, etc.) should not take saw palmetto.



## St. John's Wort

St. John's Wort is an herbal remedy receiving much attention in the press. It is named for St. John the Baptist.

**Uses:** Can be used as an anti-

depressant for the treatment

of mild depression.

How it works: Exactly how this herb works

is not known. It is thought

to increase the amount of certain brain chemicals,

such as serotonin.

**Dose:** Look for a standardized hypericin content of 0.3%.

The dose is 300 mg three times daily.

**Safety:** St. John's Wort is only effective in the treatment of

mild depression. It should not be used for moderate to severe depression. It should not be used if you are taking other drugs to treat mood disorders.

The most common side effect of St. John's Wort is stomach upset. It may help to take St. John's Wort with food. Sensitivity to sunlight may also be a side effect. Use a sunscreen with SPF>15 to avoid this problem.

Patients taking bromocriptine, pergolide, and pramiperxole should not take St. John's Wort.



## **Valerian**

Valerian is one of the most popular and widely used herbs. It is known as the "Valium of the 1800s," even though it has no chemical similarity to that drug.



**Uses:** Sedative, muscle relaxant, antispasmodic and

chronic insomnia.

**How it works:** The active ingredients of valerian have not been

identified and exactly how it works is not known.

**Dose:** Tincture (1:5): 4 - 6 ml

Fluid Extract: (1:1): 2 - 3 ml

Capsules: (1 - 1.5% valtrate or 0.8% valeric acid):

400 - 900 mg.

Valerian root is also commonly used as a tea.

**Safety:** Side effects include morning drowsiness, headache,

excitability, mild gastric distress and uneasiness. It has been shown to help people fall asleep, but not to

stop them from waking during the night.

Don't use valerian if you are taking prescription sedatives. Patients who have mild to severe depression should not take valerian.

## **Quick Reference - Conditions**

If you have any of the following conditions:	Be cautious about using these herbs:
Allergies (ragweed, pollens, etc.)	Chamomile Echinacea Feverfew Yarrow Goldenrod St. John's Wort Slippery Elm
Diabetes	Garlic Ginger Ginseng Hawthorn Ma Huang (Ephedra) Nettle
Hypertension (High Blood Pressure)	Devil's Claw Ginseng Goldenseal Hawthorn Licorice Ma Huang (Ephedra) Squill Yohimbe
Depression	Kava-kava

Adapted from the Pharmacist's Letter (volume 98, number 1)

## **Quick Reference - Medication**

If you are taking any of these medications:	Check with your doctor before using these herbs:
Anticoagulants (Warfarin)	Alfalfa Chamomile
Antiplatelet drugs (aspirin, NSAIDs, ticlopidine, clopidogrel)	Cinchona Bark Clove Oil Ginkgo Garlic Ginger Ginseng Feverfew Omega 3 Fatty Acids: from fish and flax seed oil
CNS Stimulants (decongestants, Ritalin, caffeine, theophylline, appetite suppressants)	Garcina Cambogia Guarana Kola Ma Huang (Ephedra) St. John's Wort Yohimbe
CNS Depressants (alcohol, opioids, benzodiazepines, antihistamines)	Hawthorn Kava-kava Skullcap Valerian
Antidepressants (tricyclics, SSRIs, MAO inhibitors)	Kava-kava Ginseng Ma Huang (Ephedra) Passion flower St. John's Wort Yohimbe Valerian

Adapted from the Pharmacist's Letter (volume 98, number 1)



## Herbs that are Unsafe

Arcina Belladonna Bryony

Bryony Calamus

Chaparrel

Coltsfoot

Comfrey

Ephedra (Ma-Huang)

European Mistletoe

False Hellebore

Foxglove

Germander

Henbane

Indian Snakeroot

Ipecac

Licorice

Life Root

Lily of the Valley

Lobelia

Male Fern

Mandrake

Pasque Flower

Pennyroya1

Pheasant's eye

Pokeroot

Sassafras

Senna

Squil1

Thorn Apple

Yellow Jasmine

Yohimbe

If you have questions about any of these herbs, please contact your provider.

# Herbs that Could Potentially Increase Risk for Bleeding

Danshan

Fever Few

Garlic

Ginger

Ginkgo

Horse Chestnut Juniper

Saliva Miltiorrhiza

White Willow



# Herbs that Contain Coumarin Derivatives (Increased Risk for Bleeding)

Angelica Root
Arnica Flower
Asafoetida
Chamomile
Fenugreek
Horse Chestnut
Licorice Root

Lovage Root
Passion Flower
Quassia
Red Clover
Rue
Sweet Clover

## **Herbs that Contain Salicylates**

Meadowsweet Poplar Willow Bark

## Supplements that Can Cause Elevations in the INR

Danshan
Devil's Claw
Dong Quai
Papin
Vitamin E
Vitamin C

Produced by Network Marketing/Communications
Designed and printed by the Network Print Shop, Bath VA Medical Center
Photos by Kimberly R. McKinzie

3/02



## **Reaching Us Is Easy**

#### **VA Medical Centers:**

#### Albany

113 Holland Avenue Albany, NY 12208 (518) 626-5000

#### Ratavia

222 Richmond Avenue Batavia, NY 14020 (585) 343-7500

#### Bath

76 Veterans Avenue Bath, NY 14810 (607) 664-4000

#### Buffalo

3495 Bailey Avenue Buffalo, NY 14215 (716) 834-9200

#### Canandaigua

400 Fort Hill Avenue Canandaigua, NY 14424 (585) 394-2000

#### Syracuse

800 Irving Avenue Syracuse, NY 13210 (315) 476-7461

#### Community-Based **Outpatient Clinics:**

#### Auburn

Auburn Memorial Hospital 17 Lansing St. Auburn, NY 13021 (315) 255-7011

#### Bennington

325 North Street Bennington, VT 05201 (802) 447-6913

#### Binghamton

425 Robinson Street Binghamton, NY 13001 (607) 772-9100

#### Catskill

Greene Medical Bldg. 159 Jefferson Heights Catskill, NY 12414 (518) 943-7515

#### Clifton Park

1673 Route 9 Clifton Park, NY 12065 (518) 383-8506

#### Cortland

1104 Commons Avenue Cortland, NY 13045 (607) 662-1517

#### Dunkirk

The Resource Center 325 Central Avenue Dunkirk, NY 14048 (716) 366-2122

#### Elizabethtown

P.O. Box 277, Park St. Elizabethtown, NY 12932 (518) 873-3295

#### Elmira

Health Services Blda. 200 Madison Ave., Suite 2E Elmira, NY 14901 (877) 845-3247

Camp Mohawk Plaza Rt 30A Fonda, NY 12068 (518) 853-1247

#### Glens Falls

84 Broad Street Glens Falls, NY 12801 (518) 798-6066

#### Jamestown

The Resource Center 896 East Second Street Jamestown, NY 14701 (716) 661-1447

#### Kinaston

63 Hurley Avenue Kingston, NY 12401 (845) 331-8322

#### Lackawanna

Our Lady of Victory Family Care Center 227 Ridge Road Lackawanna, NY 14218 (716) 822-5944

Niagara ◆Lockport

Falls Buffalo

Dunkirk

Jamestown

Lockport Ambulatory Care Center 5875 S. Transit Road Lockport, NY 14094 (716) 433-2025

Rochester

Canandaigua

Wellsville A Elmira Binghamton

▲ VA Medical Center Outpatient Clinic
 VISN 2 Network Office

#### Malone

115 Park Avenue Malone, NY 12953 (518) 481-2545

#### Massena

1 Hospital Drive Massena, NY 13662 (315) 764-1711

#### Niagara Falls

Niagara Family Medicine Assoc., PC 620 10th Street, Suite 709 Niagara Falls, NY 14301 (716) 285-6663

#### Olean

Olean General Hospital 500 Main St. Olean, NY 14760 (585) 375-7555

#### Oswego

Seneca Hills Health Services Center County Route 45A Oswego, NY 13126 (315) 343-0925

#### Plattsburgh

Medical Office Bldg. 206 Cornelia St., Suite 307 Plattsburgh, NY 12901 (518) 566-8563

#### Rochester

♦Watertown

Syracuse

Auburn

Rome

Sidney

465 Westfall Road Rochester, NY 14620 (585) 242-0160

Malone Plattsburg

Elizabethtown

Glens Falls

Catskill \*

Kingston •

Clifton Fonda Park

◆ Cortland Schenectady ◆ ❖◆Troy

Bennington 4

Albany

#### Rome

125 Brookley Road, Bldg. 510 Rome, NY 13441 (315) 336-3389

#### Schenectady

1475 Balltown Road Niskayuna, NY 12309 (518) 346-3334

#### Sidney

109 North Main Street Bainbridge, NY 13733 (607) 967-8590

#### Troy

500 Federal Street Troy, NY 12180 (518) 274-7707

#### Watertown

218 Stone Street Watertown, NY 13601 (315) 788-5050

#### Wellsville

Jones Memorial Hospital Health Care Center 15 Loder Street Wellsville, NY 14895 (585) 596-4111

